

ARVINA HX2

High load bearing greases

The logo for MOLYSLIP, featuring the brand name in a bold, italicized, sans-serif font with a registered trademark symbol, set against a red rectangular background.

Description

MOLYSLIP ARVINA HX2 is a mineral oil based, calcium sulphonate complex thickened grease designed to lubricate bearings operating under extreme high load conditions. The inherent high load carrying capability of the functional thickener system is enhanced by the high viscosity base oil and micronized molybdenum disulphide solids to deliver lubricating performance where conventional greases would fail.

The calcium sulphonate complex thickener of ARVINA HX2 inherently possesses outstanding resistance to water ingress – the mechanical stability of the grease is largely unaffected by water contamination and bearings are effectively protected from corrosion.

ARVINA HX2 is suitable for use in plain, ball and roller bearings operating in a wide variety of heavily loaded applications.

Features and benefits

- High temperature capability up to +140°C
- Excellent load carrying and anti-wear properties
- Highly effective protection against corrosion
- Outstanding resistance to water wash-off

Instructions for use

MOLYSLIP ARVINA HX2 can be applied manually, via a standard grease gun or via a central lubricating system capable of pumping an NLGI 1/2 grease.

As with all greases used for the first time, check compatibility with the grease used previously and if necessary purge bearings prior to application.

Packaging

400g cartridge, 450g tin, 4.5kg and 18kg pail

Technical data (typical values)

| Property | Test method | Result |
|------------------------------|-------------|---------------------|
| Appearance | - | Smooth black grease |
| Worked penetration | IP50 | 290-320 |
| NLGI classification | - | 1/2 |
| Drop point | IP132 | >280°C |
| Corrosion resistance (EMCOR) | IP220 | 0:0 |
| 4-ball weld load | IP239 | >700kg |
| Oil separation | IP121 | 1% |
| Base oil viscosity | IP71 | 400 cSt |
| Operating temperature range | - | -20°C to +140°C |

Storage

Store MOLYSLIP ARVINA MX2 out of direct sunlight. Storage temperature should be controlled to between 5°C and 35°C.

The product information in this publication is based on knowledge and experience at the time of printing. There are many factors outside our control or knowledge which affect the use and performance of our products, for which reason it is given without responsibility.
Issue date 06-17



SAFETY DATA SHEET

Molyslip Arvina HX2

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name Molyslip Arvina HX2

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Grease. Lubricant.

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier Molyslip
4 Huntsman Drive
Northbank Industrial Park
Irlam
Manchester
M44 5EG
UK
+44 (0)161 804 4700
+44 (0)161 804 4701
compliance@molyslip.co.uk

1.4. Emergency telephone number

Emergency telephone +44 (0)161 804 4700

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

2.2. Label elements

Hazard statements NC Not Classified

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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| | |
|---|----------------------|
| Naphthenic acids, zinc salts, basic | 1-5% |
| CAS number: 84418-50-8 | EC number: 282-762-6 |
| Classification Aquatic Chronic 3 - H412 | |

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|-----------------------------------|--|
| General information | If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel. |
| Inhalation | No specific recommendations. If throat irritation or coughing persists, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if any discomfort continues. |
| Ingestion | No specific recommendations. If throat irritation or coughing persists, proceed as follows. Rinse mouth. Get medical attention if any discomfort continues. |
| Skin contact | No specific recommendations. Rinse with water. Get medical attention if any discomfort continues. |
| Eye contact | Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues. |
| Protection of first aiders | Use protective equipment appropriate for surrounding materials. |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|----------------------------|---|
| General information | The severity of the symptoms described will vary dependent on the concentration and the length of exposure. |
| Inhalation | No specific symptoms known. |
| Ingestion | No specific symptoms known. May cause discomfort if swallowed. |
| Skin contact | Prolonged contact may cause dryness of the skin. |
| Eye contact | No specific symptoms known. May be slightly irritating to eyes. |

4.3. Indication of any immediate medical attention and special treatment needed

| | |
|-----------------------------|--------------------------------|
| Notes for the doctor | Treat symptomatically. |
| Specific treatments | No special treatment required. |

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|---------------------------------------|--|
| Suitable extinguishing media | The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire. |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |

5.2. Special hazards arising from the substance or mixture

| | |
|-------------------------|-------------|
| Specific hazards | None known. |
|-------------------------|-------------|

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Hazardous combustion products Thermal decomposition or combustion products may include the following substances:
Harmful gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions No specific recommendations. For personal protection, see Section 8.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Reuse or recycle products wherever possible. Collect spillage with a shovel and broom, or similar and reuse, if possible. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Keep container tightly sealed when not in use.

Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store away from incompatible materials (see Section 10). No specific recommendations.

Storage class Unspecified storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Appropriate engineering controls No specific ventilation requirements.

Eye/face protection No specific eye protection required during normal use. Large Spillages: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

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| | |
|--|---|
| Hand protection | No specific hand protection recommended. Large Spillages: Wear protective gloves. |
| Hygiene measures | Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product. |
| Respiratory protection | No specific recommendations. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn. |
| Environmental exposure controls | Not regarded as dangerous for the environment. |

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

| | |
|---------------------|-----------------------------------|
| Appearance | Grease. |
| Colour | Dark. Grey. |
| Flash point | > 150°C COC (Cleveland open cup). |
| Bulk density | < 1000 kg/m ³ |

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

| | |
|-------------------|--|
| Reactivity | See the other subsections of this section for further details. |
|-------------------|--|

10.2. Chemical stability

| | |
|------------------|---|
| Stability | Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions. |
|------------------|---|

10.3. Possibility of hazardous reactions

| | |
|---|---|
| Possibility of hazardous reactions | No potentially hazardous reactions known. |
|---|---|

10.4. Conditions to avoid

| | |
|----------------------------|---|
| Conditions to avoid | There are no known conditions that are likely to result in a hazardous situation. |
|----------------------------|---|

10.5. Incompatible materials

| | |
|---------------------------|--|
| Materials to avoid | No specific material or group of materials is likely to react with the product to produce a hazardous situation. |
|---------------------------|--|

10.6. Hazardous decomposition products

| | |
|---|--|
| Hazardous decomposition products | Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. |
|---|--|

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|------------------------------|--|
| Toxicological effects | Not regarded as a health hazard under current legislation. |
|------------------------------|--|

Acute toxicity - oral

| | |
|-------------------------------------|--|
| Notes (oral LD₅₀) | Based on available data the classification criteria are not met. |
|-------------------------------------|--|

Acute toxicity - dermal

| | |
|---------------------------------------|--|
| Notes (dermal LD₅₀) | Based on available data the classification criteria are not met. |
|---------------------------------------|--|

Acute toxicity - inhalation

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| | |
|--|---|
| Notes (inhalation LC₅₀) | Based on available data the classification criteria are not met. |
| <u>Skin corrosion/irritation</u> | |
| Animal data | Based on available data the classification criteria are not met. |
| <u>Serious eye damage/irritation</u> | |
| Serious eye damage/irritation | Based on available data the classification criteria are not met. |
| <u>Respiratory sensitisation</u> | |
| Respiratory sensitisation | Based on available data the classification criteria are not met. |
| <u>Skin sensitisation</u> | |
| Skin sensitisation | Based on available data the classification criteria are not met. |
| <u>Germ cell mutagenicity</u> | |
| Genotoxicity - in vitro | Based on available data the classification criteria are not met. |
| <u>Carcinogenicity</u> | |
| Carcinogenicity | Based on available data the classification criteria are not met. |
| IARC carcinogenicity | None of the ingredients are listed or exempt. |
| <u>Reproductive toxicity</u> | |
| Reproductive toxicity - fertility | Based on available data the classification criteria are not met. |
| Reproductive toxicity - development | Based on available data the classification criteria are not met. |
| <u>Specific target organ toxicity - single exposure</u> | |
| STOT - single exposure | Not classified as a specific target organ toxicant after a single exposure. |
| <u>Specific target organ toxicity - repeated exposure</u> | |
| STOT - repeated exposure | Not classified as a specific target organ toxicant after repeated exposure. |
| <u>Aspiration hazard</u> | |
| Aspiration hazard | Not relevant. Solid. |
| General information | No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure. |
| Inhalation | No specific symptoms known. |
| Ingestion | No specific symptoms known. May cause discomfort if swallowed. |
| Skin contact | Prolonged contact may cause dryness of the skin. |
| Eye contact | No specific symptoms known. May be slightly irritating to eyes. |
| Route of entry | Ingestion Inhalation Skin and/or eye contact |
| Target organs | No specific target organs known. |

SECTION 12: Ecological Information

Ecotoxicity Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Toxicity Based on available data the classification criteria are not met.

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12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

12.4. Mobility in soil

Mobility No data available.

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way.

Disposal methods Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

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SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

| | |
|-----------------------------|--|
| National regulations | Health and Safety at Work etc. Act 1974 (as amended). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits. |
| EU legislation | Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). |

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

None of the ingredients are listed or exempt.

SECTION 16: Other information

| | |
|---|---|
| Abbreviations and acronyms used in the safety data sheet | ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail. IATA: International Air Transport Association. ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air. IMDG: International Maritime Dangerous Goods. CAS: Chemical Abstracts Service. ATE: Acute Toxicity Estimate. LC ₅₀ : Lethal Concentration to 50 % of a test population. LD ₅₀ : Lethal Dose to 50% of a test population (Median Lethal Dose). EC ₅₀ : 50% of maximal Effective Concentration. PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative. |
| Training advice | Only trained personnel should use this material. |
| Revision date | 23/10/2017 |
| Revision | 1 |
| SDS number | 5201 |
| Hazard statements in full | H412 Harmful to aquatic life with long lasting effects. |

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.